

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (Currently Amended) A method for automatically testing audio channels of an audio device, comprising:

generating a first digital format tone ~~in digital format~~ at a synthesizer associated with an audio sound card;

converting the first digital format tone ~~in digital format~~ to an analog format tone;

playing the analog format tone to a mixer of the audio sound card;

after the analog format tone is received at the mixer ~~of the audio sound card, internally~~ looping the analog format tone through an internal loopback mechanism of the audio sound card ~~to a recording~~ audio channel of the audio sound card;

converting the analog format tone to a second digital format tone;

recording the second digital format tone;

comparing the second recorded digital format tone to the first digital format generated tone; and

if the second recorded digital format tone is substantially similar to the first digital format generated tone, designating the audio sound card as passing an audio test.

2. (Currently Amended) The method of Claim 1, whereby if the second recorded digital format tone is substantially similar to the first digital format generated tone, designating the recording audio channel of the audio sound card as passing an audio test.

3. (Previously Presented) The method of Claim 1, further comprising playing the analog format tone at a known frequency.

4. (Previously Presented) The method of Claim 1, further comprising playing the analog format tone at a known volume intensity.

5. (Previously Presented) The method of Claim 1, wherein the synthesizer is a frequency synthesizer.

6. (Previously Presented) The method of Claim 1, wherein the synthesizer is a tone wave table synthesizer.

7. (Previously Presented) The method of Claim 1, wherein the synthesizer is a frequency modulation (FM) synthesizer.

8. (Currently Amended) The method of Claim 1, after converting the analog format tone to the second digital format tone and recording second digital format tone, converting the second recorded digital format tone from a time domain to a frequency domain.

9. (Currently Amended) The method of Claim 8, whereby converting the second recorded digital format tone from a time domain to a frequency domain includes converting the second recorded digital format tone from a time domain to a frequency domain via a Fast Fourier Transformation (FFT).

10. (Currently Amended) The method of Claim 8, further comprising comparing a frequency of the second recorded digital format tone with a known frequency of the first digital format generated tone.

11. (Currently Amended) The method of Claim 10, whereby the second recorded digital format tone is substantially similar to the first digital format generated tone if the frequency of the second recorded digital format tone is the same as the known frequency of the first digital format generated tone.

12. (Currently Amended) The method of Claim 8, further comprising comparing a volume intensity of the second recorded digital format tone with a known volume intensity of the first digital format generated tone.

13. (Currently Amended) The method of Claim 12, whereby the second recorded digital format tone is substantially similar to the first digital format generated tone if the volume intensity of the second recorded digital format tone is the same as the known volume intensity of the first digital format generated tone.

14. (Currently Amended) The method of Claim 8, after converting the second recorded digital format tone from a time domain to a frequency domain, further comprising:

calculating a DC offset value for the second recorded digital format tone;

comparing the calculated DC offset value to a known acceptable DC offset value to determine whether an unacceptable level of DC offset is produced when the first digital format tone ~~in digital format~~ is converted to the analog format tone and is looped through the internal loopback mechanism to the recording audio channel; and

if the calculated DC offset value is unacceptable, designating the recording audio channel as failing the audio test.

15-18. (Canceled)

19. (Currently Amended) A method for automatically testing a record function associated with an audio channel of an audio device across varying frequencies, comprising:

generating a first digital format tone ~~in digital format~~ at a first frequency at a synthesizer associated with an audio sound card;

converting the tone in digital format to an analog format tone;

playing the analog format tone ~~at a first frequency~~ to a mixer of the sound card;

after the analog format tone is received at the mixer ~~of the audio sound card, internally~~ looping the analog format tone through an internal loopback mechanism of the audio sound card to a recording audio channel of the sound card;

converting the analog format tone to a second digital format tone;

recording the second digital format tone;

converting the recorded second digital format tone from a time domain to a frequency domain via a Fast Fourier Transformation (FFT);

comparing a frequency of the recorded second digital format tone with the first frequency; and

if the frequency of the recorded second digital format tone is the same as the first frequency, designating the audio channel as passing a record test at a known frequency.

20. (Currently Amended) The method of Claim 19, further comprising repeating the steps of Claim 19 whereby the first digital analog format tone is generated played at a second frequency in order to test recording the analog format tone over the recording audio channel at varying frequencies.